

Learning how to do things differently

Challenges in sharing tacit knowledge for agricultural and rural development (with examples from India and Namibia)

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- Linkages between knowledge, learning and action
- Tacit and explicit knowledge
- Knowledge conversion as a way to sharing tacit knowledge
- Knowledge as an asset vs. knowledge in action
- The role of learning alliances and communities of practice in sharing tacit knowledge
- The role of projects in developing and sharing tacit knowledge
 - Example 1: Common pool resources management in India
 - Example 2: The Kavango Livestock Interest Group in Namibia





Linkages between knowledge, learning and action





Tacit and explicit knowledge





Tacit and explicit knowledge - continued

Author	Largely tangible	Largely intangible
Polanyi (1958)	Explicit knowledge	Tacit knowledge





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Polanyi (1958)	Explicit knowledge	Tacit knowledge
Gibbons et al. (1994)	Mode 1 knowledge: Ideas, methods, values and norms associated with the Newtonian model of science	Mode 2 knowledge: Contextual knowledge, used in application, trans-disciplinary, heterogeneous





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Blackler (1995)	Embrained knowledge Encoded knowledge	Encultured knowledge Embodied knowledge Embedded knowledge





Knowledge components of different types of water-related innovations

Knowledge types	Water purification tablets	Hand pump	Farmer- managed irrigation	Community water rights	Logo of the NGO "Water Aid"
Embrained	Medium	Medium	Low	Low	Low
Embodied	Low	High	High	Medium	Low
Embedded	High	High	High	High	Low
Encoded	Low	Low	Medium	Medium	High
Encultured	Low	Low	High	High	Medium



Source of categories: Blackler, F. (1995) 'Knowledge, knowledge work and organizations: an overview and interpretation', *Organization Studies*, Vol. 16, No. 6, pp. 1021–046



Implications

- Different types of knowledge constitute different types of challenges to those who want to share them
- Tacit knowledge, which is either embedded in systems and processes, embodied in the skills and experiences of individuals, or encultured in social norms and world views, cannot easily be captured and shared in media traditionally used for scientific knowledge
- Therefore, different approaches and techniques to knowledge sharing are needed.











The SECI process of knowledge conversion

ſ	→ Tacit	Tacit	
	Socialisation	Externalisation	
Tacit	 Sharing experiences to create shared mental models Learning through observation, imitation and practice Example: Apprenticeship 	 Articulating TK in explicit concepts Use of metaphors, analogies, hypotheses and models Concept creation through dialogue and collective reflection 	↓ Explicit
	Internalisation	Combination	
Tacit	 Embodying EK into TK knowledge Learning by doing" to arrive at shared mental models Use of documents, manuals and oral stories 	 Systemising concepts into a knowledge system Combining different bodies of explicit knowledge Use of media, including IT 	Explicit
L	Explicit	Explicit -	
	fter Neneka I and Tekenshi H (1005) The k		Natural

Source: after Nonaka, I. and Takeuchi, H. (1995) The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation, Oxford, Oxford University Press. (1995)





Knowledge conversion or knowledge in action?

Different types of organisational knowledge

	Tacit	Explicit
Individual	∢Generati	ve Dance »
Collective	Rnowledge thr	ough knowing

Source: Cook, S. D. N. and Brown, J. S. (1999) 'Bridging epistomologies: the generative dance between organizational knowledge and organizational knowing', *Organization Science*, Vol. 10, No. 4, July–August 1999





Institutional mechanisms and knowledge types

Transfer / development of knowledge types	Project	СоР	LA
Embrained	Like 'problem-ed'	Like-minded	Unlike-minded and 'problem-ed'
Embodied	Action research	Purpose	Action research
Embedded	To develop	To share	To discover and scale up
Encoded	(Project) Documents	Information base	Information base
Encultured	Given	Personal drive	(re)Created



Source: Pels, J. (2005) Personal communication: Review of paper for the LA symposium.



Example 1:

Managing Common Pool Resources (CPRs) in India

- DFID funded research project "Common pool resources in semi-arid India dynamics, management and livelihood contributions"
- Partners: research institutes, NGOs and community based organisations
- Purpose: share and document lessons learnt from CPR management in India.
- Methods: review of secondary sources and two more detailed state studies to identify best practices (KI interviews)
- Outcomes:
 - Importance of tacit knowledge in CPR management
 - Raised interest in and awareness about CPR issues
 - Follow-up initiatives in India: partnerships / social capital
 - WASSAN (the Watershed Support Services and Activities Network)
- Conclusions: Social capital (trust) and knowledge developed in (research) projects can feed into existing networks and COP





Example 2:

Kavango Livestock Interest Group (KLIG) in Namibia

- DFID funded "Kavango Farming Systems Research and Extension Project" (KFSRE)
- Partners: Ministry of Agriculture, Water and Forestry (MAWAF), local government, NGOs, CBOs, other projects
- Purpose: To assist MAWAF in testing and implementing a livelihoods-focused farming systems approach.
- KLIG: "Spin-off" of KFSRE (champion = KFSRE APO), started as a forum to address livestock issues in an integrated way.
- Outcomes:
 - KLIG continued after the end of KFSRE, building on the social capital developed earlier.
 - > Remains an informal network, but has successfully tapped into other resources
 - > Identified key constraints to livestock enterprises in the district
 - Acts as a coordinating & lobbying body for livestock-related interventions
- Conclusions: Social capital and trust developed during the project was used as a catalyst for a more sustainable, long-term initiative

